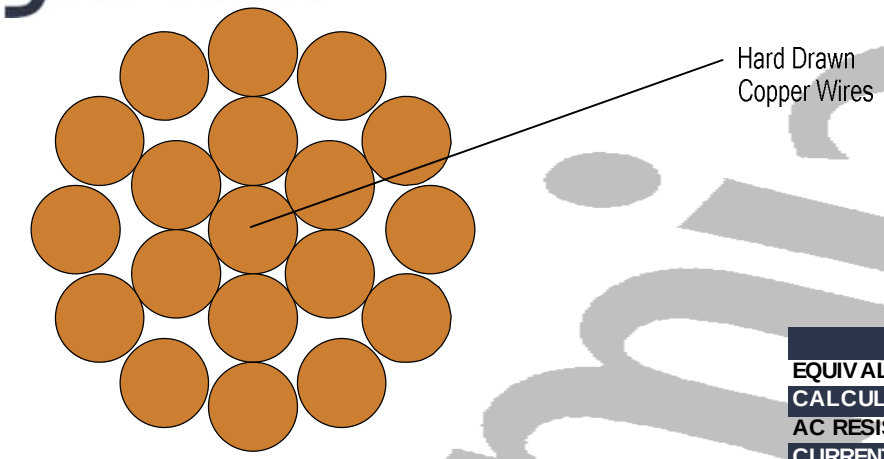
Prysmian Australia Pty. Ltd.
A.C.N. 096 594 080 A.B.N. 36 096 594 080
Locked Bag 7042
Liverpool Business Centre 1871 NSW, Australia

This document remains the property of Prysmian Australia Pty.Ltd
The copying or distribution of this document or any information
it contains, by anyone other than Prysmian is strictly prohibited.





MECHANICAL / PHYSICAL PROPERTIES AND DATA	UNITS	VALUE
CONDUCTOR MATERIAL:	-	HD Cu
CONDUCTOR STRANDING (NOMINAL):	No./mm	19 / 2.00
CONDUCTOR C.S.A. (NOMINAL):	mm²	59.7
CONDUCTOR DIAMETER (APPROX.):	mm	10.0
CALCULATED BREAKING LOAD (CBL):	kN	23.6
MAXIMUM OPERATING TEMPERATURE:	°C	75
FINAL MODULUS OF ELASTICITY (Calculated):	GPa	118
COEFFICIENT OF LINEAR EXPANSION:	/°C x 10^{-6}	17
MINIMUM BENDING RADIUS (DURING INSTALLATION):	mm	200
MINIMUM BENDING RADIUS (INSTALLED SET IN POSITION):	mm	120
MINIMUM DRUM BARREL DIAMETER:	mm	240
MINIMUM RECOMMENDED BENDING (SHEAVE) **DIAMETER:**	mm	200
CABLE WEIGHT PER METRE (APPROX.):	kg/km	538

NOTES:
The value provided for CBL is calculated as per AS1746, and is a nominal value only.

ELECTRICAL PROPERTIES AND DATA	UNITS	VALUE
EQUIVALENT ALUMINIUM AREA (NOMINAL):	mm²	93.6
CALCULATED DC RESISTANCE (MAXIMUM):	Ω/km @20°C	0.303
AC RESISTANCE (MAXIMUM):	Ω/km @75°C	0.367
CURRENT RATING WINTER NIGHT (RURAL WEATHERED) **STILL:**	A	229
CURRENT RATING WINTER NIGHT (RURAL WEATHERED) **1 m/s WIND:**	A	378
CURRENT RATING WINTER NIGHT (RURAL WEATHERED) **2 m/s WIND:**	A	439
CURRENT RATING SUMMER NOON (RURAL WEATHERED) **STILL:**	A	171
CURRENT RATING SUMMER NOON (RURAL WEATHERED) **1 m/s WIND:**	A	335
CURRENT RATING SUMMER NOON (RURAL WEATHERED) **2 m/s WIND:**	A	398
CURRENT RATING WINTER NIGHT (INDUSTRIAL WEATHERED) **STILL:**	A	250
CURRENT RATING WINTER NIGHT (INDUSTRIAL WEATHERED) **1 m/s WIND:**	A	391
CURRENT RATING WINTER NIGHT (INDUSTRIAL WEATHERED) **2 m/s WIND:**	A	450
CURRENT RATING SUMMER NOON (INDUSTRIAL WEATHERED) **STILL:**	A	158
CURRENT RATING SUMMER NOON (INDUSTRIAL WEATHERED) **1 m/s WIND:**	A	329
CURRENT RATING SUMMER NOON (INDUSTRIAL WEATHERED) **2 m/s WIND:**	A	392
INDUCTIVE REACTANCE TO 0.3 m:	Ω/km	0.276
FAULT CURRENT RATING (d):	kA².sec	68
GEOMETRIC MEAN RADIUS:	mm	3.79

NOTES:
The value provided for DC Resistance is calculated as per AS1746, and is a nominal value only.

CURRENT RATINGS:

(a) Values given are calculated only.

(b) **Summer Day** based on 35°C Ambient Air Temperature, Temperature Rise by 40°C to Maximum Operating Temperature 75°C, Rual Emissivity = 0.5, Absorbtion = 0.5, Solar Radiation Intensity = 1000W/m², and Angle Of Wind (where applicable) = 90°.

(c) **Winter Night** based on 10°C Ambient Air Temperature, Temperature Rise by 40°C to Maximum Operating Temperature 50°C, Rural Emissivity = 0.5, Absorbtion = 0, Solar Radiation Intensity = Nil, and Angle Of Wind (where applicable) = 90°.

(d) **Fault Rating** is calculated on an initial temperature of 40°C and a maximum short circuit temperature of 160°C.

Customer Approval:

Name*:

Signature*:

Position*:

Company*:

Date*:

***To be completed & returned at order.**

TITLE:

To AS 1746

19/2.00mm Bare Over Head Hard Drawn Copper Conductor

Reason For Re-Issue:
Not applicable, first issue.

Scale: NTS Colours are for illustration only and may not necessarily reflect actual colours in final product.

Drawn by: A. Vasta

Issue Date: 08-05-2024

Issue No.: 1

Drawing Ref No.:
19-2.00 mm HD Cu BOH (20199255)